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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/617,067

Filing Date: July 16, 2000 Appellant(s): PAPALIA ET AL. **MAILED** 

JUL 0 7 2006

**GROUP 3600** 

Philip H. Burrus, IV For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 6/01/2006 appealing from the Office action mailed 9/21/2004.

#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

#### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

#### (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (8) Evidence Relied Upon

US 5,237,507	7.507
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Chasek

August 17,1993

US 6,281,601

Edelman et al.

August 28, 2001

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### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

#### Claim Rejections - 35 USC § 103.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 4-8, 10-19 and 22 are unpatentable under 35 U.S.C. 103(a) over Chasek (US 5,237,507) in view of Edelman et al. (US 6,281,601).

Chasek teaches a system for developing real-time economic incentives to encourage efficient use of the resources of a regulated electric utility, comprising:

#### Independent Claims

Claim 1. A system comprising:

a plurality of power machines (generators) disposed in the power plant (102) (Fig. 1; C. 2, L. 7; C. 3, L. 53), said power machines are connected to a utility's central computer (103) (control means) via recording meter (112) (C. 3, L. 51-56);

said (remote) control means further including:

a power pool (grid) central computer (105) connected to the utility's central computer (103), said computers (103) and (105) are connected an export energy sample meter (114), wherein said computer (105) processes export energy information along with estimated upcoming demand-related prices determined in the utility's central computer (103) (C. 3, L. 58 – C. 4, L. 1);

a means for monitoring a market price of electricity (C. 5, L. 51-54);

a means for monitoring a market price of hydrocarbon fuels (C. 5, L. 40-49; C. 4, L. 56);

a means for calculating the difference between the market price of electricity and hydrocarbon fuel (C. 8, L. 41-51; C. 4, L. 14-22);

a means for evaluating current demand for each generator and weather data (*local data*) (C. 5, L. 18-19, 59-60; C. 6, L. 37-40).

While operation of a generator to produce electric energy inherently indicates means for actuating said generator, Chasek, however, does not specifically teach said actuating means.

Edelman et al. (Edelman) teaches a system and method for a distributed generation power networking system, comprising a turbo-generator, and a control circuitry (which appears to be remote) for controlling operation of said generator by generating and transmitting a *signal* to turn said generator on and off, said control circuitry generates said signal based on evaluation of local demand (*local data*) (C. 4, L. 59 – C. 5, L. 7; C. 6, L. 30-40). Furthermore, Edelman teaches a *plurality* of generators which can be controlled in the same way (C. 5, L. 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chasek to include a means for actuating said generators, said means including a control circuitry for controlling operation of said generators by generating and transmitting a signal to turn said generators on and off, said control circuitry generating said signal based on evaluation of local demand, as disclosed in Edelman, because it would advantageously allow to implement power generation control strategies for meeting the local demand while reducing the starting and stopping of the generators, thereby increasing the overall efficiency of the system (Edelman; C. 1, L. 47-55). Language as to "wherein control circuitry evaluates local data <u>after the</u> receipt of a control signal and before actuation of the power machines" appears to indicate an intended use of the system, and, therefore, is given no patentable weight.

MPEP 2106 (II) (C) states: "Language that suggests or makes optional but does not require steps to be performed or <u>does not limit a claim to a particular structure</u> does not limit the scope of a claim or claim limitation."

#### Claim 10. A system comprising:

a plurality of power machines (generators) disposed in the power plant (102) (Fig. 1; C. 2, L. 7; C. 3, L. 53), said power machines are connected to a utility's central computer (103) (control means) via recording meter (112) (C. 3, L. 51-56);

said (remote) control means further including:

a power pool (grid) central computer (105) connected to the utility's central computer (103), said computers (103) and (105) are connected an export energy sample meter (114), wherein said computer (105) processes export energy information along with estimated upcoming demand-related prices determined in the utility's central computer (103) (C. 3, L. 58 – C. 4, L. 1);

a means for monitoring current demand for each generator and weather data (*local data*) (C. 5, L. 18-19, 59-60; C. 6, L. 37-40).

a means for monitoring a market price of electricity and price of hydrocarbon fuels (a means for considering electricity generation factors) (C. 5, L. 40-54; C. 4, L. 56); said (remote) control means further including:

a means for calculating the difference between the market price of electricity and hydrocarbon fuel (C. 8, L. 41-51; C. 4, L. 14-22);

a means for communication between said (remote) control means and said generators (a telephone network) (C. 7, L. 39-40; C. 3, L. 66-67).

While operation of a generator to produce electric energy inherently indicates means for actuating said generator, Chasek, however, does not specifically teach said actuating means.

Edelman teaches a system and method for a distributed generation power networking system, comprising a turbo-generator, and a control circuitry (which appears to be remote) for controlling operation of said generator by generating and transmitting a *signal* to turn said generator on and off, said control circuitry generates said signal based on evaluation of local demand (*local data*) (C. 4, L. 59 – C. 5, L. 7; C. 6, L. 30-40). Furthermore, Edelman teaches dispatch logic based on minimum operating setpoint of said generator to *prevent repetitive starting and stopping* of said generator (C. 7, L. 21-24), thereby indicating "override" feature. Furthermore, Edelman teaches a *plurality* of generators which can be controlled in the same way (C. 5, L. 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chasek to include a means for actuating said generators, said means including a control circuitry for controlling operation of said generators by generating and transmitting a signal to turn said generators on and off, said control circuitry generating said signal based on evaluation of local demand, as disclosed in Edelman, because it would advantageously allow to implement power generation control strategies for meeting the local demand while reducing the starting and stopping of the generators, thereby increasing the overall efficiency of the system (Edelman; C. 1, L. 47-55). Language as to "wherein the control circuitry evaluates the local data after receipt of the actuation signal; further wherein the control circuitry omits evaluation of the local data upon receipt of the override signal" appears to indicate an intended use of the system, and, therefore, is given no patentable weight.

MPEP 2106 (II) (C) states: "Language that suggests or makes optional but does not require steps to be performed or <u>does not limit a claim to a particular structure</u> does not limit the scope of a claim or claim limitation."

#### Dependent Claims

Claim 2. Edelman teaches said system, comprising a control circuitry for controlling operation of said generator by generating and transmitting a *signal* to turn said generator on (C. 1, L. 56 – C. 2, L. 5). The motivation to combine Chasek with Edelman would be to implement power generation control strategies for meeting the local demand while reducing the starting and stopping of the generators, thereby increasing the overall efficiency of the system.

Claim 4. Edelman teaches said system comprising a control circuitry (which appears to be remote) for controlling operation of said generator by generating and transmitting a (override) signal to turn said generator on and off (C. 4, L. 13 – C. 5, L. 58). The motivation to combine Chasek with Edelman would be to implement power generation control strategies for meeting the local demand while reducing the starting and stopping of the generators, thereby increasing the overall efficiency of the system.

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Claim 5. Chasek teaches said system, comprising a means for reading data from a meter (C. 3, L. 51-57).

- Claim 6. Edelman teaches said system, further comprising a means for reading data related to the operational performance of said generator (C. 1, L. 56 C. 7, L. 64). The motivation to combine Chasek with Edelman would be to implement power generation control strategies for meeting the local demand while reducing the starting and stopping of the generators, thereby increasing the overall efficiency of the system.
- Claim 7. Chasek teaches said system, further comprising a means for reading the local energy rate structure (C. 3, L. 42 C. 4, L. 36).
- Claim 8. Chasek teaches said system, further comprising a means for calculating the load demand and printing and preparing a billing statement (C. 4, L. 9-11, 50-65).
- **Claim 11**. Chasek teaches said system, further comprising a means for aggregating power to sell on a power market (C. 4, L. 13-22).
- Claim 12. Chasek teaches said system, further comprising a means for generating a billing statement (C. 4, L. 13-22).
- Claim 13. Chasek teaches said system, wherein the electricity generation factor is selected from the group consisting of market rate structure, peak shaving information, load shedding information and information relating to *the ability to sell power to the grid* (C. 4, L. 13-22).
- Claim 14. Chasek teaches said system, which operates in a competitive environment (C. 4, L. 43).
- Claim 15. Chasek teaches said system, further comprising a means for calculating the load demand and to print and prepare a billing statement (C. 4, L. 9-11, 50-65).
- **Claim 16**. Chasek teaches said system, further comprising a means for selling power to the grid (C. 4, L. 14-22).
- Claim 17. Edelman teaches said system, which participates in load shedding (C. 1, L. 56-67). The motivation to combine Chasek with Edelman would be to implement power generation control strategies for meeting the local demand while reducing the

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starting and stopping of the generators, thereby increasing the overall efficiency of the system.

Claim 18. Edelman teaches said system, which participates in peak shaving (C. 1, L. 56-67). The motivation to combine Chasek with Edelman would be to implement power generation control strategies for meeting the local demand while reducing the starting and stopping of the generators, thereby increasing the overall efficiency of the system.

Claim 19. Chasek teaches said system, wherein the data is selected from the group consisting of electricity prices, *hydrocarbon prices*, *load demand, and weather* (C. 4, L. 56; C. 6, L. 38-39).

Claim 22. Chasek teaches said system comprising means for monitoring operational condition of said generator (C. 5, L. 40-50).

Claim 21 is unpatentable under 35 U.S.C. 103(a) over Chasek in view of Edelman et al. and further in view of Norris et al. (US 5,510,780).

#### Dependent Claim

Claim 21. Chasek in view of Edelman teach all the limitations of claim 21, except specifically teaching a distributor capable of licensing the power machines.

Norris et al. (Noris) teaches a system for controlling a power-generation equipment wherein said equipment is leased (C. 1, L. 6-9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chasek and Edelman to include licensing of power machines, as disclosed in Norris, because it would advantageously increase revenue thereby making it more attractive to the customers.

Futhermore, Information as to "a distributor <u>capable</u> of licensing the power machines" is suggestive language and not given patentable weight. Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. MPEP 2106.

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#### (10) Response to Argument

## Ground 1.

Claims 1, 2, 4-8, 10-19 and 22.

Applicant argues, that Chasek in view of Edelman (combination) fails to disclose control circuitry that evaluates local data after the receipt of a control signal and before actuation of the power machines. Specifically, the Applicant argues that Edelman, while teaching circuitry for providing a control signal to the power machine, does not include means for evaluating data like the price of electricity and hydrocarbons (fuel for generators) upon the receipt of a command signal; and Chasek, while teaching a central utility computer that monitors temperature and demand, does not disclose control circuitry coupled to the power machine for evaluating local data after receiving a control signal from the central computer.

In response to this argument, the Examiner stipulates that Chasek teaches a system for developing real-time economic incentives to encourage efficient use of the resources of a regulated electric utility system comprising a plurality of generators distributed in plurality of communities, wherein, based upon information related to operation cost of generators (including market cost of generator fuel), market price of electricity and local demand and temperature, control circuitry makes a decision (hourly) should electricity be bought or generated to be sold (C. 4, L. 13-19). Specifically, Chasek teaches:

a means for monitoring a market price of electricity (C. 5, L. 51-54);

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a means for monitoring a market price of hydrocarbon fuels (C. 5, L. 40-49; C. 4, L. 56);

a means for evaluating current demand for each generator and weather data (local data) (C. 5, L. 18-19, 59-60; C. 6, L. 37-40);

a means for calculating the difference between the market price of electricity and hydrocarbon fuel (C. 8, L. 41-51; C. 4, L. 14-22).

Furthermore, Chasek discloses the system wherein operation of power machines (generators) is controlled based on the market and local data. While operation of a generator to produce electric energy inherently indicates a necessity of means for actuating said generator, Chasek, however, does not specifically teach said actuating means.

To clarify the matter, the Examiner applied Edelman to show said control circuitry coupled to a generator to generate a *control signal for turning said generator on and off*. Furthermore, Edelman teaches that *generation of said signal is based on evaluation of local demand (local data*) (C. 4, L. 59 – C. 5, L. 7; C. 6, L. 30-40).

Language as to "wherein control circuitry evaluates local data <u>after the receipt of</u>

<u>a control signal and before actuation of the power machines"</u> appears to indicate an
intended use of the system, and, therefore, is given no patentable weight.

MPEP 2106 (II) (C) states: "Language that suggests or makes optional but does not require steps to be performed or <u>does not limit a claim to a particular structure</u> does not limit the scope of a claim or claim limitation." Therefore, in this particular case, while

addressing the structural limitations of the claim, the Examiner considered said language as being non-functional.

#### Ground 2.

Applicant argues, that language as to "wherein control circuitry evaluates local data <u>after the receipt of a control signal and before actuation of the power machines</u>" is functional language and should be given patentable weight.

In response to this argument, the Examiner points out that all claims in the current application are directed to an apparatus. The combination of Chasek in view of Edelman discloses all the structural limitations of the claims. Information as to "wherein control circuitry evaluates local data <u>after the receipt of a control signal and before actuation of the power machines</u>" appears to indicate only an intended use of the system, or intended method of operating said system. Furthermore, MPEP 2106 (II) (C) states: "Language that suggests or makes optional but does not require steps to be performed or <u>does not limit a claim to a particular structure</u> does not limit the scope of a claim or claim limitation." Therefore, in this particular case, while addressing the structural limitations of the claim, the Examiner considered said language as being non-functional.

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#### Ground 3.

#### Claim 21.

Applicant argues, that Chasek in view of Edelman and further in view of Norris fails to disclose that "the control circuitry *omits evaluation of the local data upon receipt* of the override signal".

In response to this argument, the Examiner points out that all claims in the current application are directed to an apparatus. The combination of Chasek in view of Edelman and further in view of Norris discloses all the structural limitations of the claim. Information as to "the control circuitry *omits evaluation of the local data upon receipt of the override signal"* appears to indicate only an intended use of the system, or intended method of operating said system. Furthermore, MPEP 2106 (II) (C) states: "Language that suggests or makes optional but does not require steps to be performed or <u>does not limit a claim to a particular structure</u> does not limit the scope of a claim or claim limitation." Therefore, in this particular case, while addressing the structural limitations of the claim, the Examiner considered said language as being non-functional.

# (11) Related Proceeding(s) Appendix

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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